CHAPTER 12

Financial Plan

Introduction

Federal regulations require a financial plan as an MPO Long Range Plan element. The purpose is to demonstrate that proposed investments are reasonable in the context of reasonably anticipated future revenues over the life of the plan and for future network years (2004, 2014, 2020, and 2030). Meeting this test is called "fiscal constraint."

The 2030 Long Range Transportation Plan is fiscally constrained. The transportation investments proposed to meet metropolitan transportation needs over the next 25 years are consistent with revenue forecasts. The Financial Plan details both proposed investments and revenue forecasts over the life of the plan.

The proposed investments were developed by the Greensboro Urban Area MPO in cooperation with NCDOT, GTA, and PART. These investments include roadway, rail, transit, bicycle, and pedestrian facilities and services for the life of this plan. They reflect existing and committed projects, the Transportation Improvement Program, the City Capital Improvement Programs, and the future plans of the MPO, NCDOT, the City of Greensboro, GTA, and PART. They also reflect needs analysis conducted for the plan including the Thoroughfare Plan Update, an extensive inter-agency and interdepartmental staff review, and the results of three rounds of public input in plan development. Roadway maintenance and transit operating and maintenance costs were forecasted as discussed below.

Revenue forecasts were developed after a review of previous state and local expenditures, current funding trends, and likely future funding levels. The revenue forecasts involved consultation with NCDOT, GTA, and PART. All dollar figures discussed in this section were analyzed in current year dollars. Figures are presented in constant dollars so that they will be fully comparable through time against a constant baseline value (the current year dollar).

This chapter provides an overview of the forecasted cost and revenue assumptions, along with the detailed research results used to derive these values.

Financial Plan Overview

Tables 12.1 and 12.2 show the forecasted cost and revenue for the Greensboro Urban Area 2030 Transportation Plan.

Table 12.1 — Greensboro Urban Area 2030 Transportation Plan Revenue Forecast Summary

		A	ll Amounts in T	housands	of Dollars	,		
Begin Fiscal								
Year TIP Revenues			State		Local Re	venues		
						Powell		
Period	Highway	Transit	Maintenance	CIP	GTA	Bill	Bonds	Totals
2004	93,810	11,320	20,830	10,300	7,210	5,500	7,990	156,960
2005-								
2014	<i>7</i> 52,460	127,900	275,100	90,520	102,710	57,910	55,190	1,461,790
2015-								
2020	375,690	113,220	242,330	51,460	86,120	37,410	o	906,230
2021-								
2030	484,880	127,060	600,520	94,650	180,010	67,120	0	1,554,230
Totals	1,706,840	379,500	1,138,780	246,930	376,050	167,940	63,180	4,079,210

- CIP = Capital Improvement Program
- GTA = Greensboro Transit Authority
- Bond funds include roadway, public transportation, and pedestrian and bicycle projects
- Bond program set to end in 2010; no additional bond referendums are assumed for 2020 and 2030
- Highway TIP revenues represent highway, rail, bicycle, pedestrian, and noncapacity adding roadway improvement projects

Table 12.2 — Greensboro Urban Area 2030 Transportation Plan Cost Summary

		Al	l Costs in Thou	sands of Do	llars		
Begin Fiscal Year		Capital		Operati	nance		
Period	Highway	Transit	Non- Motorized	State Roads	Local Roads	Transit	Totals
2004	101,800	7,960	4,800	20,830	5,500	10,570	151,460
2005- 2014	805,560	95,930	42,680	275,100	57,910	134,650	1,411,840
2015- 2020	351,630	45,120	26,780	242,330	37,410	154,080	857,360
2021- 2030	389,540	15,680	40,230	600,520	67,120	279,280	1,392,360
Totals	1,648,520	164,700	114,500	1,138,780	167,940	578,570	3,813,010

Transit includes PART and GTA rubber tire bus service and PART commuter rail

Revenues reflected under the CIP do not represent an actual surplus. This money will be fully allocated in subsequent years to local projects such as roadway and sidewalk construction and maintenance, as well as to GTA. Many of these projects are non-capacity improvement projects such as intersection improvements, bridge projects, safety enhancements, and transit operations and maintenance.

The following tables compare costs to revenues by mode of transportation, and further document that the plan meets the fiscal constraint test.

Table 12.3 — Roadway Costs and Revenues

_	Roadway Costs and Revenues* All Amounts in Thousands of Dollars								
	Capital	Roadway Rever	Capital		Maint.	Mainte Reve	Maint.		
Period	Costs	Highway TIP	Bonds	Capital Balance	Costs	State	Local	Balance	
2004	101,800	93,810	7,990	0	26,330	20,830	5,500	0	
2005- 2014	805,560	752,460	55,190	2,090	333,010	275,100	57,910	0	
2015- 2020	351,630	375,690	0	24,060	279,740	242,330	37,410	0	
2021- 2030	389,540	484,880	0	95,340	667,640	600,520	67,120	0	
Totals	1,648,520	1,706,840	63,180	121,500	1,306,720	1,138,780	167,940	0	

^{*} CIP funds are excluded from balance calculation. See note in document.

Forecasted roadway revenues exceed estimated costs throughout the duration of the plan by 6.8% of the revenue total. The TIP highway fund surplus is concentrated in the years after 2015. This reflects fewer identified roadway investments, ongoing capital investment needs, and continuing growth in the Federal and State transportation programs as described below, as well as the fact that non-capacity roadway projects are not specifically identified after 2014 (see table 12.10).

Table 12.4 — Transit Costs and Revenues

-	Transit Costs and Revenues (All Costs in Thousands of Dollars)								
		Costs	Revenue						
Period	O&M	Capital	Total	Total	Difference				
2004	10,570	7,960	18,530	18,530	0				
2005-2014	134,650	95,930	230,580	230,610	30				
2015-2020	154,080	45,120	199,200	199,340	140				
2021-2030	279,280	15,680	294,960	307,070	12,110				
Totals	578,580	164,690	743,270	755,550	12,280				

Transit costs and revenues cover both GTA and PART. A small surplus is indicated by the analysis. At 1.6% of total forecasted revenues, this appears to be insignificant.

Table 12.5 — Pedestrian and Bicycle Costs and Revenues

Pedestrian & Bicycle Costs and Revenues (All Costs in Thousands of Dollars)								
Period	Costs	Revenues	Difference					
2004	4,802	4,802	0					
2005-2014	42,679	42,679	0					
2015-2020	26,784	26,784	0					
2021-2030	40,231	40,231	0					
Totals	114,496	114,496	О					

Maintenance expenses accounted for under roadways.

Bicycle and pedestrian costs and revenues are balanced, reflecting the current programs of the City of Greensboro, Guilford County, and NCDOT.

The following sections provide more detailed assumptions regarding revenue, capital costs, maintenance costs, and future revenue needs. Roadway project lists by horizon year (2004, 2014, 2020, and 2030) are documented and mapped in **Tables 12.6 through 12.9** and **Maps 3.1 through 3.4**.

Revenue Assumptions

Highway TIP Revenues

The highway TIP revenue forecast was developed based on past, current, and expected future funding levels in collaboration with NCDOT. A key assumption is the expected growth of federal and state revenue for roadway projects in the Greensboro area. Highway, rail, safety, bridges, resurfacing, and enhancement projects listed in the TIP were considered.

In addition, federal Surface Transportation Plan Direct Apportionment (STP DA) funds were applied. These funds are directed by the MPO in consultation with NCDOT. STP DA funds are forecasted to increase at a rate of 1.5% annually, with money allocated toward highway, bicycle, pedestrian, and transit projects.

The specific assumptions for each horizon year are as follows:

2004—Equivalent to the cost of funded projects listed for 2004 in the 2004-2010 Metropolitan Transportation Improvement Program (MTIP).

2005-2014—Revenues for 2005 to 2010 are based on the projects listed in the 2004-2010 MTIP. Revenues for 2011 to 2014 are expected to grow at an annual rate of 3%, reflecting the expected vigorous construction schedules of the western and eastern portions of the urban loop, as well as general program growth.

2015-2020—A 1% annual growth rate is assumed throughout this period to reflect modest program expansion. A one-time 50% decrease in funds is conservatively assumed to occur in 2018 with the completion of major projects such as the Urban Loop and the US 220 / NC 68 Connector.

2021-2030—Program growth is forecasted to continue at 1% annually.

Transit TIP Revenues

Forecasted revenues for federal and state transit funding were developed in collaboration with the Greensboro MPO, GTA, and PART. The values shown in **Table 12.1** are a combination of revenues for GTA and PART. Mobility Greensboro was used to develop the transit assumptions found in this financial plan.

Current and previous transit funding levels were studied to develop assumptions for future years. Federal, state, and local funding all were analyzed by funding type. Federal Capital and Operating Grants were assigned a conservative growth factor of 2% annually. STP-DA funding for transit was assumed in 2005 and between 2013-2014 and 2015-2020.

PART Express bus costs and revenues were calculated based on current capital and operating costs. Fleet replacement and expansion was estimated through the 2030 horizon year based on communication with PART. Capital costs and revenues were assumed for the construction of an intermodal transportation center which will serve PART rail and express bus service.

PART rail costs and revenues were calculated for the regional commuter rail starter line from NC A&T to Hanes Mall based on the Triad Major Investment Study Preliminary Draft Report. Revenues were set to equal cost estimates and assumed to come from 25% local, 25% state, and 50% federal sources. These revenues are tallied under the Transit TIP Revenues item. These costs and revenues were then adjusted to reflect only the portion that falls in the MAB. The length of the line in this area was obtained from PART.

State Roadway Maintenance Revenues

State roadway maintenance funds were forecast based on historical funding data (1990-2002) for Guilford County obtained from NCDOT Division 7. These values were converted to 2004 dollars and were then used to obtain a trend of average annual rate of increase. A 5% annual growth factor was used as a more conservative estimate from the 7% actual trend.

Capital Improvement Program (CIP) Funds

As discussed previously, the City of Greensboro's Capital Improvement Program (CIP) funds are used for local projects such as roadway and sidewalk construction and maintenance. The specific funding sources considered in the CIP funds listed in **Table 12.1** are the Street and Sidewalk Revolving Fund and the State Highway Allocation Fund (not including Powell Bill revenues). Funding amounts for the past 5 years were considered for specific revenue sources, and were then projected at a conservative growth rate of 0.80% per year.

Local Funds

The LRTP assumes the Mobility Greensboro 2009 service goals are implemented by 2014. This reflects the likelihood that the plan will need to be implemented over a longer time period than originally recommended in Mobility Greensboro. Significant service expansion is assumed by 2014 to facilitate the goal of doubling system ridership.

Greensboro Transit Authority (GTA) Funds

Local revenue forecasts for GTA were based on continuation of current funding sources, as well as new sources proposed by the Mobility Greensboro Plan. Mobility Greensboro included a detailed analysis of service expansion needs and potential revenue sources. This provided the basis for the LRTP fiscal analysis. Mobility Greensboro funding options were selectively incorporated into the LRTP assumptions as follows

Mobility Greensboro Based Assumptions

- Property tax mileage rate is increased to maximum authorized level to \$0.035 per \$100 of assessed value in FY '07
- Vehicle motor pool tax of \$10.00 is in place starting in 2010
- Full cash fare for all fare categories is increased by 25% from 2010 to 2030
- Annual ridership increases to 4.4 million as a mid-term goal

Current Funding Source Assumptions

- Investment income grows by 1% per year from 2005 to 2030
- Intangibles tax revenue grows by 1% per year from 2005 to 2030
- Duke Power payment revenue grows by 1% per year from 2005 to 2030
- Other income remains constant from 2005 to 2030

Powell Bill Funds

Powell Bill funds are collected by the state in the form of a gasoline tax. These funds are returned by NCDOT to eligible cities and towns for maintaining, repairing, constructing, reconstructing, or widening municipal streets. Powell Bill funds also are used for the construction and maintenance of sidewalks and bikeways located within the rights-of-way of public streets and highways. The amount of these funds distributed to a municipality is based on the number of street miles to be maintained and the City's population.

The Powell Bill funding for the planning area was reviewed for the years 1990-2003. The amounts for each of these years were converted to 2004 dollars and a trend showing the percentage of annual increase was determined. This conservative annual growth factor was applied to forecast the Powell Bill funding through

2030. The annual growth of uninflated Powell Bill funding is a result of an increase in City-maintained lane mileage.

Bond Funds

The City of Greensboro has approved bond programs for transportation investments regularly since the early decades of the last century. The current Transportation Bond program provides \$74 million between 2002 and 2010 and was approved by City voters in November 2000. A little more than \$63 million of this is allocated between 2004 and 2009, to be spent on roadway system enhancements, public transportation, pedestrian and bicycle facilities, and roadway maintenance. The Bond Program was not forecasted beyond 2010 because additional study will be needed to determine the needed scope and magnitude of future bond program needs.

Capital Cost Assumptions

Capital costs are separated into roadway, transit, and non-motorized (bicycle and pedestrian) modes.

Roadway Capital Costs

The continued growth of population, employment, and vehicle miles of travel in the MPO area will increase the demand for additional roadway facilities. Roadway capital projects were developed and assigned to horizon years based on the current investment assumptions of the Transportation Improvement Program, various technical analyses conducted during plan development, a review of public input, and consultation with MPO agencies including NCDOT. Projects listed in the MTIP were assigned the costs listed in that document. Costs for those projects not included in the MTIP were estimated using the cost-estimation spreadsheet provided by NCDOT (included in the Technical Appendix). All roadway investments were assigned to a network vear based on current status, expected project development timelines, and relative need. All project limits and descriptions have been discussed and verified with GDOT. Tables 12.6, 12.7, 12.8, and 12.9 list the roadway projects by the horizon year in which they are projected to end construction. Maps 3.1, 3.2, 3.3, and 3.4 in Chapter 3 display the location of projects for each horizon year.

Table 12.6 — Roadway Projects 2004 Horizon Year

2004									
ID	TIP#	Facility	Description / Extents	Length (miles)	Existing # Lanes	Horizon Year # Lanes	Federal Functional Class	Regionally Significant?	Estimated Project Cost
A1	111 #	Wendover Avenue	Big Tree Way to Stanley Rd.	0.4	4 lane	6 lane	Major Arterial	Yes	complete
A2	R-984	US 29	16th St. to Rockingham County line (pavement rehab)	10.9	4 lane divided	4 lane divided 6 lane	*	Yes	5,936,000
Аз	I-2402	Southern Urban Loop (I-85)	I-85 to Clapp Farm Rd.	14.7	N/A	freeway	Interstate	Yes	under cst
A4	I-2201	I-40 / US 421	Bus. 40 to W of Freeman Mill Rd.	10.9	4 lane freeway	8 lane freeway	Interstate	Yes	under cst
A5	P-3416	Norwalk Street Extension	Lee Street to Boston Road (rail crossing closing project)	0.3	N/A	3 lane	Local	No	under cst
A6		Spring Garden Street Median	Between Freeman Mill Rd. and Jackson St.	0.3	4 and 2 lane	Divided	Collector	No	omitted
	U-2913 (part)	Guilford College Road	Widen from Hornaday Rd. to Ruffin Rd. (refer to 2014 for more; remainder of the project is located in High Point)	1.1	2 lane	4-5 lane	Minor Arterial	Yes	omitted
Projects 1	not comple	eted in 2004							
		Friendly Avenue	Westridge Rd. to Holden Rd., add medians & LT lanes (refer to 2014 for the remainder)	1.4	4 lane	4-5 lane	Minor Arterial	No	\$600,000
		Creek Ridge Road	Randleman Rd. to US 220 (refer to 2014 for the remainder)	1.2	2 lane	3 lane	Collector	No	\$300,000
		Elm-Eugene Street	Vandalia Rd. to Southern Urban Loop (I-85 Bypass) (right-of-way / planning only; refer to 2014 for the remainder)	1.1	2 lane	5 lane	Minor Arterial	No	\$430,000
		Horsepen Creek - Fleming Connector	Horse Pen Creek Rd. to Fleming Rd. (includes extending existing x-sections) (planning only; refer to 2014 for the remainder)	0.7	N/A	3 lane	Collector	No	\$100,000
	U-4015 (part)	Gallimore Dairy Road	NC 68 to I-40 (not open to traffic in '05 - refer to 2014 for more; remainder of the project is located out of area)	1.0	2 lane	5 lane	Collector	No	\$1,575,000
	U-2524 (part)	Western Urban Loop	I-85 to Lawndale Dr. (not open to traffic in '05; refer to 2014 for the remainder)	15.0	N/A	6 lane freeway	Interstate	Yes	\$39,600,000
	R-2413 (part)	NC 68 / US 220 Connector	Pleasant Ridge Rd. to US 220 & widening to Rockingham Co. line (not open to traffic in '05 - refer to 2014 for more; remainder of the project is located in Rockingham Co.)	9.8	N/A	4 lane freeway	Interstate	Yes	\$8,374,000
	U-3612 (part)	Hilltop Road	Guilford College Rd. to Adams Farm Pkwy. (right-of-way only; refer to 2014 for the remainder)	1.0	2 lane	4-5 lane	Minor Arterial	No	\$1,057,000
	U-3313 (part)	Groometown Road	Wiley Davis Rd. to Wayne Rd. (right-of-way only; refer to 2014 for the remainder)	1.2	2 lane	4-5 lane	Minor Arterial	No	\$5,400,000
		Hornaday Road / Chimney Rock Road Connector	Hornaday Rd. to Chimney Rock Rd. (not open to traffic in '05; refer to 2014 for the remainder)	1.0	N/A	3 lane	Local	No	\$1,500,000
		East Market Street	Streetscape and Traffic Management (refer to 2014 for the remainder)	1.5	6 lane divided	4 lane divided	Principal Arterial	No	\$4,500,000

Table 12.7 — Roadway Projects 2014 Horizon Year

200	05-2014	4							
ID	TIP#	Facility	Description / Extents	Length (miles)	Existing # Lanes	Horizon Year # Lanes	Federal Functional Class	Regionally Significant?	Estimated Project Cost
B1		New Garden Road	Jefferson Rd. to Brassfield Rd.	1.0	2 lane	4-5 lane	Minor Arterial	No	\$3,700,000
			Westridge Rd. to Holden Rd., add medians & LT lanes (refer to 2004 for		_				
B2		Friendly Avenue	the remainder)	1.4	4 lane	4-5 lane	Minor Arterial	No	\$1,579,035
В3		Creek Ridge Road	Randleman Rd. to US 220 (refer to 2004 for the remainder)	1.2	2 lane	3 lane	Collector	No	\$2,134,990
B4		Franklin Boulevard / Florida Street Connector	McConnell Rd. to Lee St.	0.6	2 lane	3-4 w/ median	Collector	No	\$4,718,640
В5		Elm-Eugene Street	Vandalia Rd. to Southern Urban Loop (I-85 Bypass) (refer to 2004 for the remainder)	0.8	2 lane	5 lane	Minor Arterial	No	\$1,570,000
В6	R-2309	US 220	Horsepen Creek Rd. to US 220 - NC 68 Connector	6.3	2 lane	4-5 lane	Principal Arterial	Yes	\$22,500,000
B7		Mackay Road	High Point Rd. to Adams Farm Pkwy.	0.5	2 lane	5 lane	Collector	No	\$1,500,000
В8		Battleground Avenue	Cotswold Ave. to Westridge Rd.	1.3	5 lane	6-7 lane	Principal Arterial	Yes	\$3,000,000
В9		Stanley Road	Koger Blvd. to Hilltop Rd.	1.1	2 lane	5 lane	Collector	No	\$2,400,000
B10		Church Street	Cone Blvd. to Northwood St.	1.5	3 lane	5 lane	Collector	No	\$1,900,000
B11		Horse Pen Creek - Fleming Connector	Horse Pen Creek Rd. to Fleming Rd. (includes extending existing cross-sections) (refer to 2004 for the remainder)	0.7	N/A	3 lane	Collector	No	\$12,738,075
B12		Vandalia Road	Elm-Eugene St. to Pleasant Garden Rd.	1.0	2 lane	5 lane	Minor Arterial	No	\$3,000,000
B13		Summit Avenue	McKnight Mill Rd. to Brightwood School Rd.	2.3	2 lane	4-5 lane	Minor Arterial	No	\$3,900,000
B14		Summit Avenue	Bryan Park to Reedy Fork Pkwy.	0.8	2 lane	4-5 lane	Minor Arterial	No	\$772,727
B15	R-2611	West Market St.	NC 68 to Bunker Hill Rd.	3.6	2 lane	4-5 lane	Major Collector	Yes	\$15,200,000
B16	U-4015 (part)	Gallimore Dairy Road	NC 68 to I-40 (refer to 2004 for more; remainder of the project is located out of area)	1.0	2 lane	5 lane	Collector	No	\$7,837,500
B17	U-2524 (part)	Western Urban Loop	I-85 to Lawndale Dr. (refer to 2004 for the remainder)	15.0	N/A	6 lane freeway	Interstate	Yes	\$247,800,000
B18	U-2524 (part)	Chimney Rock Road Extension	Existing facility to Old Oak Ridge Rd. (part of B17)	1.3	N/A	2 lane	Local	No	Included in funding for project B17
	R-2413		Pleasant Ridge Rd. to US 220 + widening to Rockingham Co. line (refer to						
B19	(part)	NC 68 / US 220 Connector	2004 for more; remainder of the project is located in Rockingham Co.)	9.8	N/A	4 lane freeway	Interstate	Yes	\$76,946,000
B20		Merritt Drive	I-40 to High Point Rd.	1.0	3 lane	5 lane	Collector	No	\$3,460,090
B21	U-2913 (part)	Guilford College Road	Widening from Ruffin Rd to new alignment New alignment from widening to High Point Rd. (refer to 2004 for more;	2.3	2 lane	4-5 lane	Minor Arterial	Yes	\$4,785,830
			remainder of the project is located in High Point)	1.5	N/A	4 lane divided	Minor Arterial	Yes	
B22	U-3612 (part)	Hilltop Road	Guilford College Rd. to Adams Farm Pkwy. (refer to 2004 for the remainder)	0.6	2 lane	4-5 lane	Minor Arterial	No	\$2,350,000
B23	U-2412 (part)	High Point Road	Hilltop Rd. to Proposed US 311 Bypass (portion in High Point MPO)	3.8	3 lane	4-5 lane	Principal Arterial	Yes	\$25,857,000
B24	U-3313 (part)	Groometown Road	Wiley Davis Rd. to Wayne Rd. (refer to 2004 for the remainder)	1.2	2 lane	4-5 lane	Minor Arterial	No	\$4,500,000
B25	U-4006	Bridford Parkway Extension	Wendover Ave. at Hornaday Rd. to Burnt Poplar Rd. at Swing Rd.	1.1	N/A	5 lane	Collector	No	\$8,905,000
B26		Hornaday Road / Chimney Rock Road Connector	Hornaday Rd. to Chimney Rock Rd. (refer to 2004 for the remainder)	1.0	N/A	3 lane	Local	No	\$500,000
B27	U-2524 (part)	Hornaday Road / Chimney Rock Road Connector	Bridge over Urban Loop	N/A	N/A	3 lane	N/A	No	Included in funding for project B17
B28		Reedy Fork Service Road	Turner-Smith Rd. Ext. to Reedy Fork Pkwy.	1.4	N/A	5	Local	No	\$9,058,000
B29		Reedy Fork Parkway	Turner-Smith Rd Ext to Eckerson Rd.	2.2	N/A	3	Local	No	\$12,883,810
Взо		Turner Smith Road Extension	Connect Brown Summit Rd. to Turner Smith Rd.	2.0	N/A	3 lane	Major Collector	No	\$9,060,600

Table 12.7 — Roadway Projects 2014 Horizon Year Continued

200	05-2014	4							
ID	TIP#	Facility	Description / Extents	Length (miles)	Existing # Lanes	Horizon Year # Lanes	Federal Functional Class	Regionally Significant?	Estimated Project Cost
B31	111 "	Lake Jeanette Road	Lawndale Ave. to N Elm St. / Bass Chapel Rd.	2.0	2-3 lane	3-5 lane	Local	No	\$2,000,000
		Zane s carrette redu			6 lane	4 lane		110	ΨΞ,000,000
B32		East Market Street	Streetscape and Traffic Management (refer to 2004 for the remainder)	1.5	divided	divided	Principal Arterial	No No	\$6,330,350
B33	U-2524 (part)	Lake Brandt / Cotswold Connector	Lake Brandt Rd. to Cotswold Rd. (part of B17)	0.3	3 lane	3 lane	Collector	No	\$ 0
B34	(part)	Old Battleground Avenue	Street closure	0.1	N/A	N/A	N/A	No	omitted
B35	R-2612 (part)	US 421	Williams Dairy / Neelley Rd. realignment & interchange + US 421 interchange with Woody Mill Rd. (and future Hagen Stone Park Rd. Connector)	1.2	2 lane	3-5 lane	Freeway / Expressway & Collector	Yes	\$16,605,000
B36	R-4707	US 29	Eckerson Rd. / US 29 Interchange + 1 mile of freeway upgrade (Assumes U-2524 includes widening of remaining US 29 south to Urban Loop)	1.0	4 lane freeway	6 lane freeway	Freeway/Expressway	Yes	\$16,400,000
B37	U-4711	Greensboro Signal / ITS System		N/A	N/A	N/A	N/A	No	\$15,450,000
В38		Church Street	Streetscape, Lindsay St. to Friendly Ave.	0.3	N/A	N/A	Collector	No	omitted
B39		East Cone Boulevard Extension	Nealtown Rd. to Hines Chapel Rd.	2.0	N/A	4 lane divided	Minor Arterial	Yes	\$14,588,375
B40	U-2815 C	Bryan Boulevard	Inman Rd. to NC 68 (relocate roadway & construct interchange at Old Oak Ridge Rd.)	1.9	4 lane divided		Freeway/Expressway	Yes	\$11,771,700
B41		Holts Chapel Road Upgrade	Alignment & cross-section improvements, E Market St. to Ward Rd.	1.6	2 lane	2-3 lane	Collector	No	\$13,448,236
B42		Pegg Rd Thatcher Rd. Connector	Gallimore Dairy Rd. to Pleasant Ridge Rd. widening and new grade separation at I-40	2.1	N/A	4 lane divided	Collector	No	\$11,993,355
B43		Bryan Boulevard Extension	NC 68 to Pleasant Ridge Rd.	0.8	N/A	4 lane divided	Major Collector	No	\$4,038,000
B44		Sandy Ridge Road	I-40 to Market St.	1.0	2 lane	4 lane divided	Major Collector	No	\$5,529,310
B45		Alamance Church Road	US 421 to Southeast School Rd.	4.7	2 lane	5 lane	Minor Arterial	Yes	\$12,051,284
D.C	U-4015		Total M. Luci	- (- 1	-1		N	φ
B46	(part)	Gallimore Dairy Road	I-40 to Market St. Widen from Adams Farm Pkwy to Stanley Rd.	0.6	2 lane 2 lane	5 lane 5 lane	Collector Minor Arterial	No No	\$2,000,000
B47		Hilltop Road Norwalk Street Connector	Boston Rd. over railroad to existing roadway	1.3	N/A	3 lane	Collector	No No	\$721,335
B49		Not walk Street Connector	boston kd, over ramoad to existing roadway	0.3	N/A	4 lane	Conector	NO	\$1,675,400
B50		Brigham Road	Widen from West Market St. to Pleasant Ridge Rd.	1.7	2 lane	divided	Collector	No	\$4,110,600
B51		Regional Road Extension	Gallimore Dairy Rd. to Regional Rd. north of Hickory Ridge Rd. (part existing)	0.6	N/A	3 lane	Collector	No	\$1,150,800
Proj	ects not cor	mpleted in 2014							
	U-2525 (part)	Eastern Urban Loop	Lawndale Dr. to US 70 (refer to 2020 for the remainder)	13.0	N/A	6 lane freeway	Interstate	Yes	\$94,450,000
	R-2577 (part)	US 158	Forsyth Co. Line to US-220 (in conjunction w/ Bypass) (refer to 2020 for more; remainder of the project lies in Forsyth and Rockingham Cos.)	4.6	2 lane	4-5 lane	Minor Arterial	Yes	\$2,000,000

Total \$730,871,042

Table 12.8 — Roadway Projects 2020 Horizon Year

201	5-2020								
ID	TIP#	Facility	Description / Extents	Length (miles)	Existing # Lanes	Horizon Year # Lanes	Federal Functional Class	Regionally Significant?	Estimated Project Cost
C1	R-2577 (part)	US 158	Forsyth Co. Line to US 220 (includes Stokesdale Bypass) (refer to 2014 for more; remainder of the project lies in Forsyth Co.)	6.8	2 lane	4-5 lane	Minor Arterial	Yes	\$28,080,000
C2	R-2910 (part)	US 70	Rock Creek Dairy Rd. to Alamance County Line (.3 to MAB) (remainder of the project lies in Alamance Co.)	0.3	2 lane	5 lane	Major Collector	Yes	\$2,869,000
С3	U-2581	US 70	Mt Hope Church Rd. to Rock Creek Dairy Rd.	5.2	2 lane	5 lane	Minor Arterial	Yes	\$12,200,000
C4		Fleming Road / Lewiston Road	Fleming Rd. to Lewiston Rd. connection and interchange at Urban Loop	0.6	N/A	4-5 lane	Freeway / Expressway & Minor Arterial	Yes	\$11,140,530
C5		Horsepen Creek Road	New Garden Rd. to Battleground Ave.	3.4	2 lane	4-5 lane	Collector	No	\$16,816,570
C6		Summit Avenue	Brightwood School Rd. to Bryan Park Rd.	2.6	2 lane	3-5 lane	Minor Arterial	No	\$2,327,272
C ₇	U-2525 (part)	Eastern Urban Loop	Lawndale Dr. to US 70 (refer to 2014 for the remainder of the project)	13.0	N/A	4-6 lane freeway	Interstate	Yes	\$77,850,000
C8		E Cone Blvd / Urban Loop Interchange	Interchange with East Cone Blvd. and Urban Loop	N/A	N/A	N/A	Interstate	Yes	\$7,590,000
C9		I-40 / NC 68 / I-73 Connector	Old Oak Ridge Rd. to I-40	7.6	N/A	4-6 lane freeway	Interstate	Yes	\$67,827,750
C10		NC 150 Realignment	Brookbank Rd. to Summerfield Rd.	1.9	N/A	2 lane	Major Collector	No	\$8,204,466
C11		Hicone Road Extension	Lee's Chapel Rd. to Summit Ave.	0.8	N/A	3 lane	Minor Arterial	No	\$3,203,303
C12		Carmon / McLeansville Road Connector	Knox Rd. to McLeansville Rd.	1.1	N/A	2 lane	Collector	No	\$7,816,351
C13		Gallimore Dairy Road / Friendly Avenue	Realign for continuity	0.2	5 lane	5 lane	Minor Arterial	No	\$1,821,630
C14	<u></u>	Ritters Lake Road Realignment	Connect with Wolfetrail at Randleman Rd.	0.4	2 lane	3 lane	Minor Arterial	No	\$1,928,430
C15		Sandy Ridge Road Extension	Market St. to Airport Connector and interchange at Market St.	1.0	N/A	4 lane divided	Major Collector	Yes	\$17,059,100
C16		US 158 Bypass	Anthony Rd. to Angel-Pardue Rd.	1.5	2 lane	4 lane divided	Minor Arterial	Yes	omitted
C17	_	Pleasant Ridge Road	Lewiston Rd. to Summerfield Rd.	5.0	2 lane	5 lane	Major Collector	Yes	\$24,164,250
C18		Vandalia Road Extension	Pleasant Garden Rd. to Alamance Church Rd. & US 421 interchange	2.7	N/A	5 lane	Freeway / Expressway & Minor Arterial	Yes	\$12,812,863
C19		South Holden Road	South of Bus. I-85 to Kivett Dr part on new location	2.4	2 lane	4-5 lane	Minor Collector	No	\$8,504,998
C20		NC 150	NC 68 to Lake Brandt Rd. (excludes new location)	7.5	2 lane	3 lane	Major Collector	No	\$18,952,000
C21		Pleasant Ridge Road	Market St. to Lewiston Rd.	8.0	2 lane	3 lane	Major Collector	No	\$20,457,000

Total \$351,625,513

Table 12.9 — Roadway Projects 2030 Horizon Year

202	21-2030								
ID	TIP#	Facility	Description / Extents	Length (miles)	Existing # Lanes	Horizon Year # Lanes	Federal Functional Class	Regionally Significant?	Estimated Project Cost
10	R-2580	Tuemty	Description / Extents	(IIIIcs)	" Laires	" Lares	Ciuss	organicant.	110ject cost
D1	(part)	US 158	US 220 to Rockingham Co. Line (remainder of the project lies in Rockingham Co.)	1.5	2 lane	4-5 lane	Minor Arterial	Yes	\$7,600,000
D2		US 29	New single point urban interchange at Brown Summit / Turner Smith Connector	N/A	N/A	4-6 lane	Interstate	Yes	\$24,461,455
D3		Penry / Ward / Youngs Mill Connector	McConnell Rd. to Huffine Mill Rd. (realign & improve existing)	3.1	2 lane	3 lane	Major Collector	Yes	\$11,435,435
D4		Franklin Road	Railroad grade separation	N/A	N/A	N/A	N/A	No	\$10,000,000
D5		Ward Road	Railroad grade separation	N/A	N/A	N/A	N/A	No	\$12,000,000
D6		Mackay Road	Railroad grade separation	N/A	N/A	N/A	N/A	No	\$15,000,000
D7		Hilltop Road	Railroad grade separation	N/A	N/A	N/A	N/A	No	\$15,000,000
D8		Aycock Street	Railroad underpass replacement (in conjunction with PART)	N/A	N/A	N/A	N/A	No	\$11,000,000
D9		East Market Street	Railroad underpass replacement	N/A	N/A	N/A	N/A	No	\$30,000,000
D10		Rankin Mill / Flemingfield Connector	South of Keeley Rd. to Huffine Mill Rd.	0.7	2 lane	3 lane	Collector	No	\$4,017,250
D11		High Rock Road Extension	US 70 to Frieden Church Rd. (connect & improve existing facilities)	5.5	2 lane	2 lane	Collector	No	\$13,695,200
D12		Wades Store Road Extension	Mt. Hope Church Rd. to Alamance Church Rd.	1.7	2 lane	2 lane	Local	No	\$5,541,900
D13		NC 62 / Liberty Road	New Garden Rd. to Bulb Rd.	1.1	2 lane	2 lane	Major Collector	No	omitted
D14	R-2612 (part)	Burnetts Chapel / Steeple Chase / Hagen Stone Park Connector	Burnetts Chapel Rd. to Company Mill Rd., new alignments	3.3	N/A	<u>.</u>	Freeway/Expressway & Collector	Yes	\$27,499,550
D15		Airport Connector	Sandy Ridge Rd. Ext. (at I-73 Connector) to Forsyth Co. (remainder to Winston-Salem Urban Loop / I-74)	3.7	N/A	4 lane freeway	Freeway/Expressway	Yes	\$35,141,250
D16		Strawberry Road Extension	NC 150 to Lake Brandt Rd.	1.4	2 lane	2 lane	Local	No	omitted
D17		Youngs Mill / Southeast School Connector	Millpoint Rd. to Southeast School Rd.	1.2	N/A	2 lane	Minor Arterial	Yes	\$3,737,400
D18		US 29	Widen & upgrade to interstate, north of Urban Loop to Rockingham Co. line	5.5	4 lane freeway	6 lane freeway	Interstate	Yes	\$22,373,250
D19		South Dudley Street	Railroad grade separation (in conjunction with PART)	N/A	N/A	N/A	N/A	No	\$10,000,000
D20		South English Street	Railroad grade separation	N/A	N/A	N/A	N/A	No	\$12,000,000
D21		Colony Road	Railroad grade separation	N/A	N/A	N/A	N/A	No	\$7,000,000
D22		Tate Street	Railroad grade separation (in conjunction with PART)	N/A	N/A	N/A	N/A	No	\$10,000,000
D23		Benbow Road	Railroad grade separation (in conjunction with PART)	N/A	N/A	N/A	N/A	No	\$7,000,000
D24		Nealtown Road / McKnight Mill Road Connector and Extension	Huffine Mill Rd. to Eckerson Rd. (connect & improve existing facilities)	4.0	2 lane	2-3 lane	Major Collector	No	\$38,944,861
D25		Knox Road Extension	Carmon to Frieden Church Rd., w/ railroad grade separation	0.3	N/A	2 lane	Collector	No	\$8,022,406
D26		Creekview / Butler Road Connector	McCleansville Rd. to Huffine Mill Rd.	0.3	N/A	2 lane	Local	No	omitted
D27		Williams Dairy / Millpoint Road Connector	Millpoint Rd. to Williams Dairy Rd.	0.6	N/A	2 lane	Collector	No	\$4,925,656
D28		Bishops Road - Ritters Lake Road Connector	S. Holden Rd. to Ritters Lake Rd.	0.8	2 lane	3 lane	Collector	No	\$3,903,000
D20 D29		Florida Street Extension	Franklin Blvd. Ext. to Mt. Hope Church Rd. (new & improve existing)	4.0	N/A	4 lane divided	Major Collector	Yes	\$3,903,000 \$21,890,150
D29 D30		Hicone Road Widening	US 29 to Hines Chapel Rd.	""	2 lane		Minor Arterial	No	
		Summit Ave Extension (info only, not in		3.3		5 lane		i i	\$17,346,300
D31	<u> </u>	LRTP)	Greenbrook Rd to Benaja Rd	1.4	N/A	2 lane	Local	No	omitted

Total \$389,535,063

Non-capacity roadway projects listed in the MTIP also were included in the roadway costs for each horizon year. Those projects include intersection safety, bridges, rail crossing and passenger rail, ITS, and safety improvements. These projects are not included in the transportation modeling analyses because they are non-capacity improvement projects and because their effect on the transportation system generally cannot be modeled using the regional travel demand model.

Table 12.10 summarizes the non-capacity roadway categories by horizon year. No projects are noted beyond 2014 because the TIP does not identify this type of improvement so far out. Such projects are generally anticipated by the plan and will be identified in future Transportation Improvement Programs and local programs. The 2020 and 2030 horizon years do not have projects listed because these years are not accounted for in the TIP.

Table 12.10 — Non-Capacity Roadway Project Summary

Non-Capacity Roadway Projects	
2004	
Pavement and Bridge Rehab & Safety Improvements	\$335,000
Bridge Projects	\$27,132,000
Intersection Safety Projects	\$1,495,720
Railroad Improvements	\$3,463,280
Total:	\$32,426,000
2014	
Pavement and Bridge Rehab, Interstate Lighting & ITS Improvements	\$44,196,000
Bridge Projects	\$21,380,000
Intersection Safety Projects	\$998,290
Railroad Improvements	\$8,115,120
Total:	\$74,689,410

Transit Capital Costs

Transit capital costs are based on the 2004-2010 Metropolitan Transportation Improvement Program, the Mobility Greensboro report, and consultation with GTA and PART. These costs include fleet expansion and replacement as well as general system improvements. **Table 12.11** shows transit capital costs by horizon year and type, as well as the source of the itemized costs.

Table 12.11 — Estimated GTA Transit Costs

Estimated Capital Costs	
2004	
8 expansion buses (TIP)	\$2,600,000
8 replacement small buses (TIP)	\$511,000
Park-and-ride lots (unfunded TIP)	\$564,000
Dispatch scheduling software (TIP)	\$100,000
Routine capital (TIP)	\$372,000
Preventive maintenance (TIP)	\$2,502,000
Total:	\$6,649,000
2005-2014	
6 expansion buses (TIP, STP-DA allocation)	\$1,950,000
8 replacement buses (unfunded TIP)	\$2,600,000
7 replacement buses (non-TIP)	\$2,275,000
33 expansion buses (non-TIP)	\$10,725,000
9 expansion small buses (TIP)	\$576,450
19 expansion small buses (non-TIP)	\$1,216,950
34 replacement small buses (TIP)	\$2,177,700
AVL system (unfunded TIP)	\$700,000
2 transit hubs (TIP)	\$200,000
GTA facility improvements (TIP)	\$125,000
Preventive maintenance (portion TIP, portion non-TIP)	\$7,316,528
Routine capital costs (portion TIP, portion non-TIP)	\$2,614,764
Total:	\$32,477,392
2015-2020	
6 replacement buses (non-TIP)	\$1,950,000
18 replacement small buses (non-TIP)	\$1,152,900
Preventive maintenance (non-TIP)	\$3,639,792
Routine capital costs (non-TIP)	\$1,571,646
Total:	\$8,314,338
2021-2030	
10 replacement buses (non-TIP)	\$3,250,000
27 replacement small buses (non-TIP)	\$1,729,350
Preventive maintenance (non-TIP)	\$6,066,320
Routine capital costs (non-TIP)	\$2,619,410
Total:	\$13,665,080
Grand Total:	\$61,105,810
Note: TIP denotes projects listed in the current Public Transportation I Non-TIP denotes projects not listed in the current Public Transport	

Table 12.2 includes capital costs for the PART Express bus system, serving the Piedmont Triad area. PART staff provided the annual capital costs and fleet modifications for 2004-2006, adjusted to reflect only the percentage of costs incurred in the Greensboro Metropolitan Area. A conservative fleet expansion of one bus per year was assumed from 2007 until 2030. Capital



costs associated with the construction of an intermodal transportation facility were included in the 2015-2020 horizon year period to coincide with the projected opening of the first phase of the PART regional rail line.

Table 12.12 — Estimated PART Express Bus Costs

PART Express Bus Transit Capital Costs				
2004				
11 replacement buses (7 large, 4 small)	\$2,644,231			
2 expansion buses (2 small)	\$480,769			
Total:	\$3,125,000			
Total for Greensboro Metro Area:	\$1,312,500			
2005-2014				
3 expansion buses (05-06)	\$721,154			
8 expansion buses (07-14)	\$1,923,077			
8 replacement buses (07-14)	\$1,923,077			
Total:	\$4,567,308			
Total for Greensboro Metro Area:	\$1,918,269			
2015-2020				
6 expansion buses	\$1,442,308			
6 replacement buses	\$1,442,308			
Intermodal transportation center	\$11,500,000			
Total:	\$14,384,615			
Total for Greensboro Metro Area:	\$6,041,538			
2021-2030				
10 expansion buses	\$2,403,846			
10 replacement buses	\$2,403,846			
Total:	\$4,807,692			
Total for Greensboro Metro Area:	\$2,019,231			
Grand Total for Greensboro Metro Area:	\$11,291,538			

Assumptions for the PART Express bus transit capital costs include the following:

- Current fleet size is 11 (7 large, 4 small)
- 2004: 13 buses will be added, 11 as replacement, 2 as expansion 7 will be large buses, 6 will be small
- Total funding is \$3,125,000 and is split 80% federal/10% state/10% local (PART)
- PER BUS COST (assumed same for large and small buses): \$240,384.62
- 2014: NCDOT is spending \$1 million on 3 expansion vehicles (assume all large) in the next year or two (assume in 2005-2006)
- Assume the cost is equal to three times the 2004 per bus cost



- After this, assume a 1 bus per year replacement and a 1 bus per year expansion rate
- 2020: \$11.5 million of federal, state, and local funding (80%/10%/10% split) for an intermodal transportation center has been allocated to accommodate express bus and rail service
- Assume a 1 bus per year replacement and a 1 bus per year expansion rate
- 2030: Assume a 1 bus per year replacement and a 1 bus per year expansion rate

**All horizon years have had costs reduced to 42% of total to reflect portion used by service in Greensboro Urban Area

Costs for the first phase of the PART regional rail system are presented in **Table 12.2**. The total capital cost of this line was obtained from the Triad Major Investment Study Preliminary Draft Report. PART staff officials provided the anticipated years of construction of the line (2009-2017). To obtain the annual capital costs, the total cost was divided by the number of years in each horizon period during which the system would be under construction.

Table 12.13 — Estimated PART Rail Costs

PART Rail Costs				
2004	0			
2014	61,537,733			
2020	30,768,867			
2030	0			
Total:	92,306,600			

PART rail costs included the following assumptions:

- No capital costs are assumed for 2004 because construction has not yet begun
- No capital costs are assumed for 2030 because the line is expected to become operational in 2017
- Since construction is expected to last from 2009-2017, the capital costs are divided up based on the number of years in each horizon with capital costs (6 years in 2014, 3 years in 2020)

Capital Costs for Non-Motorized Transportation

The recommended investments for the bicycle and pedestrian element are based on 1) the current construction programs of the City of Greensboro, Guilford County, and the NCDOT; and 2) estimates of future funding levels based largely on these programs.

It is anticipated that more extensive improvements will be needed by 2030, but additional, more detailed work will be needed to develop a long term plan of action for this.

The LRTP assumes the continuation of an aggressive program by the City of Greensboro to retrofit existing roadways with sidewalks. It also assumes a continuation of the City's sidewalk petition program on residential streets at current levels. The LRTP also assumes continued implementation of the City and County Trail System.

The LRTP assumes sidewalks are included in all City of Greensboro roadway projects, as well as in NCDOT roadway improvement projects within the urban area. Additionally bicycle accommodations (bike lanes or wide outside shoulders) are planned for certain roadway projects. These costs are factored into the roadway cost estimates.

Bicycle and pedestrian facility capital costs and revenues were forecasted based on the assumption that currently planned funding levels will be maintained and certain additional revenue sources will become available.

The 2004-2010 MTIP includes six enhancement projects for bicycle and pedestrian facilities. The 2003-2009 CIP has designated general obligation bonds and an annual \$100,000 allocation from the street and sidewalk fund to be used for sidewalk construction projects. \$1,000,000 from the Powell Bill is allocated annually for sidewalk improvement. Finally, Surface Transportation Plan Direct Allocation (STP-DA) funds are apportioned annually starting in 2007.

The City of Greensboro plans to construct 20 miles of trail by 2017 at a total cost of \$8 million, and an additional 20 miles at a cost of \$12 million by 2030. Guilford County's Greenway Plan calls for \$1 million annually to be spent on greenways. Additionally, two one-time funding amounts will be allocated for construction of the Triad Greenway. **Table 12.14** shows the funding sources and amounts available for each horizon year.

Table 12.14 — Estimated Bicycle and Pedestrian Costs and Revenues

Bicycle and Pedestrian Funding							
		2004	2014	2020	2030		
Sidewalk Construction	Authorized Bonds	300,000	1,251,810	0	O		
	Street and Sidewalk Fund	100,000	1,000,000	600,000	1,000,000		
	Powell Bill Funds	1,000,000	10,000,000	6,000,000	10,000,000		
	TIP Enhancement Projects	75,000	477,000	0	O		
	STP-DA Projects	0	7,541,000	6,000,000	10,000,000		
	Committed Projects	1,756,057	1,694,900	0	0		
Future Trail Construction	City	571,429	7,014,286	4,483,516	9,230,769		
	County	1,000,000	10,000,000	6,000,000	10,000,000		
	Triad Greenway	0	3,700,000	3,700,000	0		
Totals		4,802,486	42,678,996	26,783,516	40,230,769		

Maintenance Cost Assumptions

Maintenance costs are divided into state roads, local roads, and transit. On-road bicycle and pedestrian facility maintenance is reflected as a part of state and local road maintenance.

State Road Maintenance Costs

State road maintenance costs are based on historical NCDOT funding from 1990 to 2002 in Guilford County. The historical values were converted to 2004 dollars so the average annual rate of increase in costs could be obtained. These costs reflected a 7% annual rate of increase. However, a more conservative 5% growth factor was applied to forecast costs through 2030.

Local Road Maintenance Costs

Local road maintenance costs are covered through Powell Bill funds. Historical Powell Bill funds for 1990-2003 were obtained from NCDOT and converted to 2004 dollars for comparison. The average annual increase was found to be 0.79%. This rate was applied to forecast Powell Bill funds through 2030.

Transit Operations and Maintenance Costs

Historic GTA operations and maintenance costs were obtained from GDOT for 1998-2004 (costs were projected for 2004). Based on the transit fleet size for the years 2002-2004, the average operations and maintenance costs were found for large buses in

the fleet. The number of buses was projected to increase from 36 in 2004 to 75 in 2014 according to the Mobility Greensboro plan. As a result, the operations and maintenance for each year up to 2030 was forecasted based on the projected fleet size for that year and the per bus cost. Personnel and benefit costs also were projected and added to the operations and maintenance costs.

PART rail operations and maintenance costs were obtained from the Triad Major Investment Study Preliminary Draft Report. According to PART officials, the first phase of the regional rail line is expected to become operational in 2017 (2020 network year). Annual operations and maintenance costs are assumed for the years 2020 to 2030.

PART staff provided the current operations and maintenance costs for express bus service along with the current fleet size, adjusted to reflect only the percentage used for service in the Greensboro Urban Area. From this information, an operations and maintenance cost was found for each bus in the fleet. Based on the projected fleet expansion, this per bus cost was then used to find the annual operations and maintenance costs.

Future Revenue Needs

The LRTP finds that GTA's service expansion plans appear reasonable, and can reasonably be funded in the timeframe noted in the plan. Actual timing of GTA's service expansion plans will depend on the availability of additional revenue sources. Revenue availability will depend in part on the results of implementation discussions that will unfold over the short to mid-term. Assuming the Mobility Greensboro Improvements are made by 2014, additional service enhancements could be expected by 2020 and 2030. However, these have not been identified in the 2030 LRTP update pending further technical assessments about what form these enhancements might take. Additional revenues sources needed to implement this plan are outlined in Mobility Greensboro.

The LRTP also finds that PART's plans appear reasonable, and can reasonably be expected to be funded in the timeframe noted in the plan. Actual implementation and timing will depend on 1) revenue availability; and 2) approval of plans by regulatory and funding agencies including the Federal Transit Administration. Discussions of revenue needs and availability will unfold in the next few years, as will PART's project development efforts.

Additional regional and local revenue sources may be needed in the future to support roadway investment as well. The financial plan assumes some future revenue sources will be in place to fund a portion of the projects listed. For instance, projected STP-DA funds are being allocated for transit capital facilities in 2005 and again in 2012-2020. Despite the fact that all projects (i.e., highway, transit, rail, bicycle, and pedestrian) in the transportation plan have revenues currently assigned to cover them over the 2030 horizon year, the need for additional funding sources must continually be evaluated, identified, and pursued to insure funding for future projects. Grant monies and authorized general obligation bonds are currently being applied to certain projects in the plan. These funds as well as other opportunities must continue to be aggressively pursued in order to provide for adequate financial support for future transportation projects.